

UNITED STATES PATENT AND TRADEMARK OFFICE

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APPLICATION NO FILING DATE FIRST NAMED INVENTOR ATTORNEY DOCKET NO CONFIRMATION NO. 10014~~-1 10 074,885 02 12 2002 Roy Zeighami 6507 05/21/2003 HEWLETT-PACKARD COMPANY EXAMINER Intellectual Property Administration TOLIN, GERALD P P.O. Box 272400 Fort Collins, CO 80527-2400 PAPER NUMBER ART UNIT

> 2835 DATE MAILED: 05-21-2003

Please find below and/or attached an Office communication concerning this application or proceeding.

	Application No.	Applicant(s)
Office Action Summary	10/074,885	ZEIGHAMI ET AL.
	Examiner	Art Unit
	Gerald P Tolin	2835
The MAILING DATE of this communication	appears on the cover sheet v	with the correspondence address
riod for Reply		MONTH/S) EDOM
A SHORTENED STATUTORY PERIOD FOR REI THE MAILING DATE OF THIS COMMUNICATIOI - Extensions of time may be available under the provisions of 37 CFR after SIX (6) MONTHS from the mailing date of this communication. - If the period for reply specified above is less than thirty (30) days, a - If NO period for reply is specified above, the maximum statutory peri - Failure to reply within the set or extended period for reply vivil, by sta - Any reply received by the Office later than three months after the ma earned patent term adjustment. See 37 CFR 1.704(b). tus	N. R.1.136(a). In no event, however, may a reply within the statutory minimum of thicod will apply and will expire SIX (6) MC atute, cause the application to become A	a reply be timely filed nirty (30) days will be considered timely DNTHS from the mailing date of this communication. ABANDONED (35 U.S.C. § 133).
1) Responsive to communication(s) filed on _	·	
2a)☐ This action is FINAL 2b)⊠	This action is non-final.	
3) Since this application is in condition for alloclosed in accordance with the practice und		
position of Claims	lian .	
4) Claim(s) 1-18 is/are pending in the applicat		
4a) Of the above claim(s) <u>14-18</u> is/are withd	rawn from consideration.	
5) Claim(s) is/are allowed. 6) Claim(s) 1-13 is/are rejected.		
7) Claim(s) is/are objected to.		
8) Claim(s) are subject to restriction and	d/or election requirement	
olication Papers	a/or election requirement.	
9) The specification is objected to by the Exami	iner.	
0) The drawing(s) filed on is/are: a) ac	ccepted or b) objected to by	the Examiner.
Applicant may not request that any objection to	the drawing(s) be held in abe	yance. See 37 CFR 1.85(a).
1) The proposed drawing correction filed on	is: a) approved b)	disapproved by the Examiner.
If approved, corrected drawings are required in	reply to this Office action.	
2) The oath or declaration is objected to by the	Examiner.	
ority under 35 U.S.C. §§ 119 and 120		
3) Acknowledgment is made of a claim for fore	eign priority under 35 U.S.C.	. § 119(a)-(d) or (f).
a) All b) Some * c) None of:		
1. Certified copies of the priority docume	ents have been received.	
2. Certified copies of the priority docume	ents have been received in .	Application No
 3. Copies of the certified copies of the papplication from the International * See the attached detailed Office action for a I 	Bureau (PCT Rule 17.2(a))	
4)☐ Acknowledgment is made of a claim for dome	estic priority under 35 U.S.C	c. § 119(e) (to a provisional application).
a) \square The translation of the foreign language $ $ 5) \square Acknowledgment is made of a claim for dome		
chment(s)		
Notice of References Cited (PTO-892) Notice of Draftsperson's Patent Drawing Review (PTO-948) Information Disclosure Statement(s) (PTO-1449) Paper No(s	5) Notice o	v Summary (PTO-413) Paper No(s) f Informal Patent Application (PTO-152)

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- 1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - Claims 1-13, drawn to a cooled electronic article, classified in class 361, subclass 700.
 - II. Claims 14-18, drawn to a method of making the article, classified in class29, subclass 890.03.
- 2. Inventions I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make other and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case steps such as communicating and flowing are so broad as to be capable of producing a multitude of different articles.
- 3. Because these inventions are distinct for the reasons given above and have acquired a separate status in the art as shown by their different classification and divergent subject matter, restriction for examination purposes as indicated is proper.
- 4. During a telephone conversation with Mr. Williams on 5-14-03 a provisional election was made with traverse to prosecute the invention of group I, claims 1-13. Affirmation of this election must be made by applicant in replying to this Office action. Claims 14-18 are withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.
- 5. Action on elected claims 1-13 follows.
- 6. The written description refers to numerals 16,20 and 35. The drawings do not show these numerals. 16a/b and 20a,b, etc. are shown. 16 is not 16a. Please correct.

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7. On page 6, 32 is both conduit and orifice. This is confusing. Please correct this also.

- 8. The following is a quotation of the second paragraph of 35 U.S.C. 112:
 - The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.
- 9. Claims 8 and 9 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

These claims recite "second" header/conduit, however the claims they depend from lack a first element which is needed for antecedent reasons.

- 10. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:
 - (a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negatived by the manner in which the invention was made.
- 11. Claims 1-13 are rejected under 35 U.S.C. 103(a) as being unpatentable over any one of McDunn, Marmillion or Ahn taken with Jaeger.

Each primary reference shows channeled dies/chips/etc., for fluid passage as claimed. Column 3 of McDunn discusses closed loop cooling. Figures 4 and 5 of Marmillion show the fluid flow and shaped channels as claimed. See also figure 2 of Ahn. Each of these references also show the sealed member closing the channels except for the inlet and outlet. The only thing lacking in these references are the particulars of the cooling system such as condenser and gravity flow. However, such are notoriously known on

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the liquid cooling art and would have been obvious to add to any of the primary references to better cool the parts. Note also that Jaeger provides the above stated cooling system details.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Gerald P Tolin whose telephone number is 703-308-3114. The examiner can normally be reached on M-F first friday off.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Leo Picard can be reached on 703-308-0538. The fax phone numbers for the organization where this application or proceeding is assigned are 703-305-1341 for regular communications and 703-305-1341 for After Final communications.

Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is 703-308-0956.

Gerald P Tolin Primary Examiner Art Unit 2835

gpt May 15, 2003